

# Natural Gas Electricity

Volume 28  
Number 6

THE MONTHLY JOURNAL FOR PRODUCERS, MARKETERS, PIPELINES, DISTRIBUTORS, AND END-USERS

## Time to Seriously Consider Optional Third-Party Clearing of FTRs?

Ann Sacra

Since the launch of the first auction for Financial Transmission Rights (FTRs)<sup>1</sup> in 1999, the Independent System Operator (ISO)—conducted FTR markets have seen tremendous growth. Six ISOs—CAISO, ERCOT, ISO-NE, MISO, NYISO, and PJM—now offer FTRs as a way to hedge exposure to the congestion charges that emerge when out-of-merit generators are dispatched during periods of transmission grid congestion. Over time, many ISOs have increased the variety of terms available for FTRs, allowing participants to purchase FTRs years in advance. Financial participants have increasingly joined the FTR markets as well, providing useful liquidity.

Many ISOs have increased the variety of terms available for FTRs, allowing participants to purchase FTRs years in advance.

Alongside the FTR markets, cleared exchanges have developed contracts that settle against the ISO Day-Ahead market. Spreads between two contract locations in the cleared exchange market function similarly to FTRs, providing participants the ability to hedge the congestion and loss portions of the

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# Natural Gas & Electricity

Associate Publisher: Robert E. Willett    Executive Editor: Isabelle Cohen-DeAngelis

Natural Gas & Electricity (ISSN 1545-7893, Online ISSN 1545-7907 at Wiley Online Library, wileyonlinelibrary.com) is published monthly, 12 issues per year, by Wiley Subscription Services, Inc., a Wiley Company, 111 River Street, Hoboken, NJ 07030-5774. Copyright © 2012 Wiley Periodicals, Inc., a Wiley Company. All rights reserved.

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Periodicals postage paid at Hoboken, NJ, and at additional mailing offices.

Subscription price (2012): One year print only: \$1,666 in U.S., Canada, and Mexico; \$1,738 outside North America. Electronic only: \$1,666 worldwide. A combination price of \$1,916 in U.S., Canada, and Mexico, \$1,988 outside North America, includes the subscription in both electronic and print formats. All subscriptions containing a print element, shipped outside U.S., will be sent by air. Payment must be made in U.S. dollars drawn on a U.S. bank. Claims for undelivered copies will be accepted only after the following issue has been received. Please enclose a copy of the mailing label. Missing copies will be supplied when losses have been sustained in transit and where reserve stock permits. Please allow four weeks for processing a change of address. Address subscription inquiries to Subscription Manager, Jossey-Bass, a Wiley Company, One Montgomery Street, San Francisco, CA 94104-4594; Tel.: (888) 378-2537, (415) 433-1767 (International); E-mail: [jbsubs@jbp.com](mailto:jbsubs@jbp.com).

Postmaster: Send address changes to Natural Gas & Electricity, Subscription Distribution US, c/o John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030-5774.

Reprints: Reprint sales and inquiries should be directed to Gale Krouser, Customer Service Department, c/o John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030-5774. Tel: (201) 748-8789. E-mail: [gkrouser@wiley.com](mailto:gkrouser@wiley.com).

Other Correspondence: Address all other correspondence to: Natural Gas & Electricity, Isabelle Cohen-DeAngelis, Executive Editor, Professional/Trade Division, c/o John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030-5774.

Indexed by ABI/Inform Database (ProQuest) and Environment Abstracts (LexisNexis).

Editorial Production, Wiley Periodicals, Inc.: Ross Horowitz

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Locational Marginal Price (LMP) between two locations. In 2009, Nodal Exchange, which offers granular locational contracts covering most of the hubs, zones, and generation nodes in the FTR markets, launched its services. Power basis trading in the cleared exchange markets started to rapidly grow as well.

For many years there has been industry discussion about the possibility of a cleared market for FTRs that would offer participants the ability to bring FTR positions into their cleared portfolios.

For many years, there has been industry discussion about the possibility of a cleared market for FTRs that would offer participants the ability to bring FTR positions into their cleared portfolios and thereby benefit from margining efficiencies and default protection. In the aftermath of the 2008 financial crisis, there has also been an increased focus on using exchanges and clearing to reduce systemic risk. In September 2009, the G20 countries met in Pittsburgh and declared in a joint statement: “All standardized OTC derivative contracts should be traded on exchanges or electronic

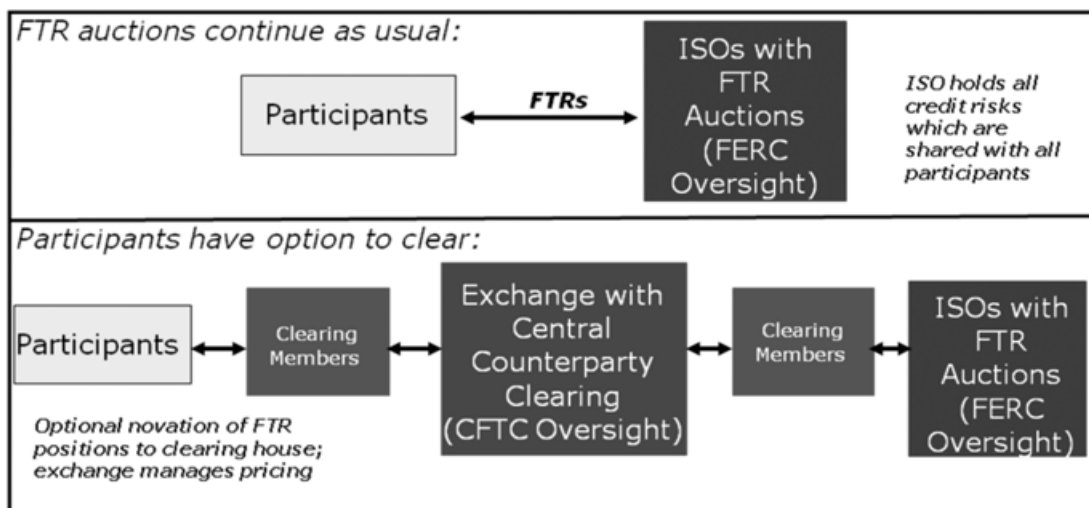
trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest.”<sup>2</sup> Additionally, in July 2010, Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act, which is intended to move more financial transactions into a cleared environment.

While FTRs are a special product that can only be awarded through the ISO auctions, having the ability to optionally third-party clear FTRs after they have been awarded is a straightforward way of reducing systemic risk and bringing key portfolio consolidation benefits to participants. Participants should be given the option to third-party clear, so that those who do not wish to clear can continue to manage their FTRs at the ISO as they do today.

### HOW IT WORKS

Before discussing the benefits of third-party clearing in detail, it is helpful to understand how third-party clearing of FTRs would occur in practice. As the ISOs are uniquely positioned to determine the amount of congestion on their network to award via FTRs, the ISO auctions for FTRs would continue as they do today. Please see **Exhibit 1** for an overview of

**Exhibit 1.** Overview of Optional Third-Party Clearing Process



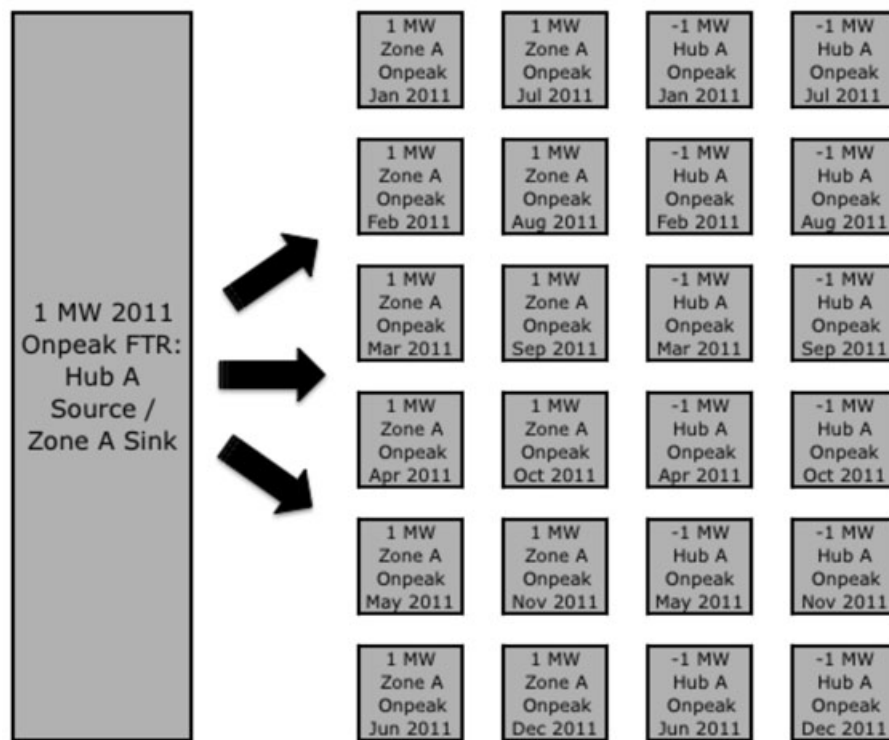
the third-party clearing process. After the participant has been awarded their FTRs by the ISO, they could elect to clear all of their FTRs that could be cleared (i.e., all of their FTRs that satisfy certain exchange-based requirements). This clearing election would then bring the FTRs into the exchange process, and the participant's FTR awards would be matched with opposing positions held by the ISO. Again, with optional clearing, entities that would prefer not to clear any of their FTRs could choose to have the FTR payment obligations remain with the ISO.

As illustrated in Exhibit 1, third-party clearing can be created without jurisdictional conflict. The FTRs continue to be auctioned and awarded in the ISOs (under FERC jurisdiction). Once the FTRs have been awarded, corresponding new futures-like contracts on a cleared exchange (under Commodity Futures Trading Commission [CFTC] jurisdiction)

can be created, and the FTR payment obligations (created under FERC regulation) can be suspended. In this way, third-party clearing creates a clean demarcation between the FERC-regulated FTRs and the corresponding CFTC-regulated futures.

The process of submitting the FTRs to clearing will eliminate the FTR and the congestion payments associated with it and create related exchange-based futures contracts (see **Exhibit 2**). As part of the conversion process, the FTR participant would purchase contracts at the FTR sink and sell contracts at the FTR source, while the ISO would do the opposite. Note that by separating the FTR into contracts at each location in the spread, rather than keeping them as a specified congestion spread contract, a reasonable number of standard contracts can be used to handle all of the millions of possible FTR spread combinations. After clearing, these new exchange contracts would

**Exhibit 2.** Conversion of an FTR Into Cleared Contracts



replace the FTRs, and all financial obligations would then be handled in the exchange marketplace (although any underfunding/overfunding situations arising from differences between the FTR auctions and the actual market would need to continue to be handled by the ISO as they are today).

After clearing, these new exchange contracts would replace the FTRs, and all financial obligations would then be handled in the exchange marketplace.

As the ISO would not trade positions in the secondary market, the combination of variation margin payments/receipts and Day-Ahead market congestion revenues would always be the same as the ISO's obligations to the ARR<sup>3</sup> holders at final contract settlement. Because the ISO's positions settle to the amount of Day-Ahead congestion revenues, and, for cleared FTR positions, the ISOs will retain the Day-Ahead revenues, the ISOs will always be financially whole at contract settlement.

The mechanics of creating an option to clear are straightforward. The legal underpinnings are in place on the exchange side, where current clearing house and member agreements governing the clearing process are already established. The ISO would need to be a legal counterparty to each submitted transaction novated to the clearing house. An additional agreement between the ISO, the exchange, and the clearing house to note special conditions and ensure compliance with exchange and clearing house rules would also be required. The ISO would also need to establish a relationship with a clearing member of the central counterparty clearing house, as well as with a backup member (in case of default of the first member). In addition, the ISO would need to have an agreement with participants who opt to clear their FTRs in order to release certain payment obligations between the ISO and the participant that are being transferred to the cleared contract.

As part of its relationship with the cleared marketplace, the ISO will have to post the variation margin when the prices of FTRs col-

lectively rise. The ISO will always recover the variation margin payment through Day-Ahead congestion revenues when the contracts go into settlement, so any variation margin posted would be temporary. Conversely, if the prices of FTRs fall, the ISO will collect the variation margin. An ISO could use a credit line to satisfy variation margin requirements, and this line of credit could also likely be a syndicated loan to reduce any risk from exposure to any one entity.

## **PARTICIPANT BENEFITS**

With an understanding of how optional third-party clearing of FTRs would work, we can now turn to the participant benefits from third-party FTR clearing. These benefits fall into three primary categories:

1. Margining efficiencies for participants that opt to clear
2. Improved default protection for all ISO FTR participants
3. Opportunities for secondary market trading

### **Margining Efficiencies**

Third-party clearing of FTRs offers participants many opportunities to benefit from margining efficiencies, as it provides a way to bring together disparate margin pools.

For background, cleared exchanges keep two types of margins: (1) the initial margin, which is collected when the position is initiated and held in order to handle the potential changes in position value that could occur while a portfolio is being unwound in the days after a default, and (2) the variation margin, which reflects the difference between the original price of the contract and its current value and can result in money flowing to or from the participant's account. Clearing houses calculate both initial and variation margins on a daily basis. Clearing houses net identical but opposing positions and provide offsets between correlated positions to allow participants to efficiently margin.

Third-party FTR clearing can create margin benefits for participants in a variety of ways, depending on what other trading (either FTR based or cleared) the participant may be doing. The following are some examples of how partic-

Participants can create margin efficiencies with third-party clearing.

- *Possible lower margin on just the FTR portfolio.* Some participants may find that when they transfer their FTR portfolio to a cleared exchange, the initial margin required is lower than at the ISO. This is most likely to occur for portfolios at ISOs that hold the full value of the FTR up front. In addition, the novation process will allow netting of FTRs. For participants that use the same location as both an FTR source and sink, netting will reduce the number of positions in the portfolio and may lead to reduced margins.
- *Possible receipt of variation margin.* If a participant has a contract that is in the money, they will continue to have the variation margin paid to them as value accumulates rather than waiting until settlement for payment. However, it should be noted that the reverse is also true if the participant has a position that is out of the money, in which case posting of variation margin helps protect against defaults, as the position cannot accumulate a deficit greater than one day.
- *Cross-margining FTRs with other power positions.* Participants can benefit from cross-margining between both their cleared exchange and cleared over-the-counter (OTC) power positions and their FTR positions. Many participants in the FTR markets (congestion-based contracts) also trade in the cleared markets (LMP contracts), and some even use the cleared markets to reduce their FTR market exposure. With third-party FTR clearing, these participants would enjoy a large offset on the combined margin held for these positions.

Even if a participant is not using the cleared market to reduce FTR position exposure, combining FTR positions with cleared power transactions can still create a margin reduction by reducing the total portfolio variability if value-at-risk (VaR) margining is used. For example, if a participant is short outright LMP at a hub, the FTR-related congestion positions will tend to offset the short outright LMP position, as congestion tends to increase with increasing power prices.

- *Cross-margining FTRs with other nonpower positions.* Participants can benefit from cross-

margining with other cleared commodity positions. A participant can still benefit from cross-margining even if their cleared market positions do not include power positions. Many FTR market participants also maintain significant cleared portfolios in natural gas. Owners of power generation are often short natural gas. As the power congestion spreads (e.g., FTR paths) often increase in value when the price of natural gas is increasing, combining an FTR portfolio with short gas positions can produce significant margin efficiencies.

- *Cross-margining among ISOs.* Participants can also benefit from bringing their positions across different ISOs together. With VaR margining, the more diverse a portfolio, the more efficient the margining becomes, so introducing multiple paths across ISOs can also reduce margin requirements.

### Improved Default Protection

While the exact rules vary from ISO to ISO, all ISOs require FTR participants to share the losses from a default in the FTR market. As the FTR market is a forward market in which participants acquire positions for as many as four years forward, losses can accumulate on positions well in advance of the related ISO settlement cycle. These accumulated losses can create substantial defaults, as illustrated by the Power Edge, LLC/Exel Power Sources LLC default in the PJM market.

Accumulated losses can create substantial defaults.

With third-party clearing, any default occurring on positions in the cleared market will be addressed by the clearing members and, if necessary, the clearing house. The clearing house/clearing member structure has successfully withstood numerous bankruptcies of both participants and clearing members through the creation of a multitiered approach to risk management, beginning with careful controls on membership and participation, continuing through daily collection of initial and variation margin, and ending with a “waterfall” structure

of default pools to cover potential losses of a defaulter. As FTR participants convert their FTR positions into cleared transactions, the default risk for the FTR market as a whole will be reduced, as the clearing participant takes its default risk with it.

Any default occurring on positions in the cleared market will be addressed by the clearing members and, if necessary, the clearing house.

Current ISO default-loss-sharing rules will continue to apply for any defaults of FTR positions that remain in the ISO market. There has been some concern that the more creditworthy participants will choose to clear, leaving the ISO pool with less creditworthy participants who are more likely to default. However, it is unclear if this will be the case—it should be remembered that events far outside of the FTR market can cause seemingly creditworthy participants to default, as happened in the case of the Lehman default.

There has been some concern that the more creditworthy participants will choose to clear, leaving the ISO pool with less creditworthy participants who are more likely to default.

It should also be remembered that FTR billings are a small percentage of total ISO billings, as FTRs only reflect differences in congestion between points, and much of the ISO billings are for the total value of energy delivered. Thus, even if there were to be a change to the size of the default pool across which losses are shared, this change would be muted by the large non-FTR billings.

### Secondary Market Opportunities

Many participants desire a secondary market for trading their FTR positions. While ISOs have provided services to facilitate secondary trading, they have had limited traction to date. In contrast, for the hub and zonal markets, active exchange and OTC (mostly brokered) markets exist in which traders transact daily. By bringing


their FTR positions into their cleared market portfolio, participants will find additional opportunities for trading.

Many participants desire a secondary market for trading their FTR positions.

In particular, Nodal Exchange offers a daily auction that has been designed for trading the granular locations also available in the FTR markets.

Growth and maturation of both the FTR markets and related exchange cleared markets make now an ideal time to bring energy market participants the benefits of optional third-party clearing.

### CONCLUSION

Growth and maturation of both the FTR markets and related exchange-cleared markets make now an ideal time to bring energy market participants the benefits of optional third-party clearing. Optional third-party clearing will provide participants the ability to merge some of their disparate pools of margin and positions, allowing for improved capital efficiencies while reducing default risk and introducing opportunities for improved secondary trading. Furthermore, converting FTRs to exchange-cleared contracts will reduce systemic risk, assisting the current regulatory agenda while maintaining a clean jurisdictional boundary between the CFTC and FERC. 

### NOTES

1. We will use “FTR” as the generic term for congestion contracts that the various ISOs/regional transmission organizations (RTOs) call a variety of names, including Financial Transmission Rights (FTRs), Congestion Revenue Rights (CRRs), and Transmission Congestion Contracts (TCCs). An FTR is a financial instrument that entitles the holder to receive compensation for certain congestion-related transmission charges that arise when differences in locational prices result from the redispatch of generators out of merit order to relieve transmission grid congestion.
2. [www.financialstabilityboard.org/press/pr\\_101025.pdf](http://www.financialstabilityboard.org/press/pr_101025.pdf).
3. In this context, ARR (Auction Revenue Rights) refer generally to the financial benefits received by the owners of transmission capacity from the annual FTR auctions managed by the various ISOs.